







NRECA T&D Engineering Committee

RUS Engineering Workshop
Orlando, FL
February 14, 2006
Bob Saint & Mike Pehosh

T&D Engineering Committee



Who is the T&D Engineering Committee?







A voluntary and collaborative community of more than 80 experienced cooperative engineering professionals who work with the Rural Utility Service's (RUS) Electric Staff Division and other standards organizations to update technical bulletins, standards and guides for electric co-op systems.



Mission:



The Mission of NRECA's Transmission & Distribution Engineering Committee is to develop and promote the implementation of the most appropriate engineering practices and materials that support rural utility challenges.



T&D Engineering Committee



Goals:







 Assist RUS in the timely development and dissemination of standards, specifications, guide bulletins, and other technical information



• Provide modern, cost effective, safe, and environmentally conscious engineering solutions utilizing appropriate techniques



T&DEC Executive Committee



Chairman: Max Davis, South Alabama EC



RUS Liaison – Georg Shultz, Electric Staff



Six Subcommittee Chairs



NRECA Liaisons: Mike Pehosh

Bob Saint

T&D Engineering Committee



T&DEC Subcommittees



Overhead Dist.: Tom Hoffman, Agralite Electric Co-op



Substation: Dan Geiger, Great River Energy



Syst. Planning: Joe Dorough, Jackson EMC



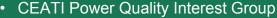
Power Quality: Ed Bevers, Rural Electric Cooperative Transmission: John Burch, Florida Keys Electric Co-op

Underground: Steven Gwinn, Warren RECC



Power Quality Subcommittee





- Solutions to Power Quality Disturbance Problems
- Establishing Power Quality Guidelines
- **Defining Grades of Power Quality**
- Review and update of Power Quality Measurement Protocol
- Impact Assessment of Distributed Wind Generation
- Customer Power Factor Correction Capacitor Application
- Annual Reliability Reporting Practices Survey
- Interruption Reporting and Service Continuity Standards for Electric Distribution Systems
- Voltage Levels of Rural Distribution Systems

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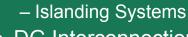
System Planning Subcommittee



IEEE DG Interconnection Standards/Guides



- Testing
- Application Guide
- Information Exchange



- **DG** Interconnection Toolkit
- Long Range Planning Guide
- Sectionalizing Guide









Transmission Lines Subcommittee



 Design Manual for High Voltage Transmission Lines



- Transmission Specifications and Drawings
- Wood
 - Concrete
 - Steel
 - Transmission Lines Grounding Design Guide

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Other Activities - Bob Saint



- Cooperative.com E&O Community
- NESC Committee and Subcommittees



 Power Systems Engineering Research Center (PSERC)



- NRECA International Division
- Software Integration Initiative (MultiSpeak®)



Overhead Distribution Line Sub.



- · Operations manual development
- Voltage Regulator bulletin review
- Guying bulletin
- Streamline bulletin and guide approval process



- DALCM activities
- Review & update 1724E-153 Guy Bulletin

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Underground Line Subcommittee



- BULLETIN 1728F-U1
- Looking at pad mount enclosures
- Semi-con jacketed cable







- Stand off brackets
- Helping update the CRN 90-8 Underground
 Distribution Design and Installation Guide
- ICC activities
- DALCM



Substation Subcommittee



- 1724E 302 Spill Prevention Guide
- Transformer Witness Testing Guide
- 1724E 301 Guide for Evaluation of Large Power Transformers Losses
- Catalog for Alternative Substation Designs

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Other Activities – Mike Pehosh



- CEATI DALCM
- Supply Chain Community
- NEETRAC



- Gridwise and Gridworks
- Wind Power America

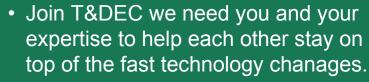


- APLIC
- NESC
- IEEE Working Groups
- IEEE-ICC
- IEEE REPC



New Members for T&DEC







- More information and an application is on cooperative.com
- Or you can contact Bob Saint or Mike Pehosh at NRECA.
 - Robert.Saint@nreca.coop
 - Michael.Pehosh@nreca.coop